Novi - Thursday, October 1, 2015 8:00 AM - 4:30 PM

#### CONCURRENT SESSION DESCRIPTIONS

#### Groundwater/Surface Water Interface Track

#### **Four Corners - Traverse City**

Ann Emington, DEQ RRD and Don Conway, Gosling Czubak

This case study focuses on means and methods to evaluate the complex hydraulic connection between the impacted aquifer and a nearby surface water body.

#### Unisys, GSI and Sewers a collaborative effort to address an on-going discharge

Steve Hoin, DEQ RRD, and Allison Valerio, Geosyntec

The Unisys Burroughs site in Plymouth Michigan has a TCE plume that is migrating directly into a sewer. The site was remediated and long term monitoring was on-going. The changes in Part 201 which now allow for compliance in a sewer prompted further investigation and ultimately allowed the DEQ and Unisys to collaborate and end the GSI monitoring program.

#### **XRI Services**

Ernest Ndukwe, DEQ RRD, and Heston Stein, CEC

This case study focuses on a demonstration of compliance with indoor air inhalation criteria via Section 20120a (18)(a-c) and remedial activities conducted to comply with GSI at a storm sewer.

# The Uniroyal East Parcel: Mercury Geochemistry CSM, an Environmental Decision Process Supporting the Detroit River Walk Development

Steve Hoin, DEQ RRD, and Barry Harding, AECOM

The Uniroyal site is situated along the Detroit Riverfront and is dominated by an industrial past and historical fill footprint containing varied contaminants. Mercury is one of the legacy contaminants found at the site and it drives decisions. Recent changes to the mercury target levels prompted the DEQ along with AECOM to complete a thorough investigation of the origin and fate of mercury the Uniroyal Site with interesting results. The presentation will include a mercury geochemistry CSM and discussion of an iterative process in evaluating risks and selection of remedial endpoint for the site.

**GSI Pathway Evaluation - ARCADIS** *Joe Quinnen and Nick Welty, ARCADIS, and Dan Rogers, Amsted Industries* This case study features a GSI pathway evaluation in which high resolution site characterization techniques, attenuation rates, and alternate monitoring points were used to developing a solution for compliance.

#### Vapor Intrusion Track

#### Marketplace Redevelopment

Kim Sakowski, DEQ RRD and Steve Willobee, LEAP

This case study features a former industrial site that was transformed into a mixed use including residential and commercial spaces made possible by addressing vapor intrusion concerns.

# (not so) Lucky Mini-Mart – Soil Vapor Sampling and Laser Induced Fluorescence As Starting Points to an Investigation

Josh Scheels, DEQ RRD, and Richard Raetz, Global Remediation Technologies

This case study features an innovative approach to adequately assess site risk and minimize or decrease overall project costs. The DEQ RRD initially evaluated the soil vapor distribution at this site to determine if a connection could be made to soil contaminant distribution.

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#### **Big Building Model Application at Former Manufacturing Facility**

Abigail Hendershott, DEQ RRD, and Paul Sterkenberg, ERM

This case study focuses on using the "Big Building Modeling" to address vapor concerns from a trichloroethene release at former manufacturing facility. This evaluation was then used to identify risks associated with the vapor intrusion pathway that were then managed to foster the redevelopment of the facility and place the property back into productive use.

#### **RACER/Yankee Air Museum**

Kevin Lund, DEQ RRD, and Tom Kinney, GHD

This case study demonstrates an assessment of the vapor intrusion pathway in an industrial setting where a large body of LNAPL is present. This work was completed at a 138,900 square foot plant building being redeveloped for future use as an Aviation Museum. An LNAPL plume is located directly under approximately 35% of the future museum floor and is the main driving force in the vapor intrusion investigation/assessment. A sub slab soil gas investigation for volatile organic compounds (VOCs) was conducted under the museum floor. This investigation did not identify any VOCs above generic non-residential screening levels presented in the MDEQ Guidance Document for the Vapor Intrusion Pathway. Additional investigation activities were completed to evaluate compounds other than VOCs due to the types of oils making up the LNAPL. VOC samples were collected and analyzed utilizing the MDEQ recommended TO-15 method using bottle-vacs. SVOCs were collected and analyzed utilizing TO-17 method which uses absorbent tubes. Multiple sample events have demonstrated no detections of VOCs or SVOCs that exceeded non-residential screening levels. These findings present lines of evidence showing the Vapor Intrusion Pathway does not represent a human health risk to visitors or workers at the future Aviation Museum.

#### Land and Resource Use Restrictions Track

#### Former Machine Shop: NAPL to No Further Action

*Emily Bertolini, DEQ RRD, and Envirosolutions* This case study features an evaluation of Non-Aqueous Phase Liquids (NAPL) and the risk management strategy approach used No Further Action Report to address NAPL.

# A Cooperative Approach to Unique Restrictive Covenant Issues--The Rose Township Superfund Site Brad Ermisch, DEQ RRD, and Todd Fracassi, Pepper Hamilton LLC

This case study highlights the collaborative approach that was taken to implement a restrictive covenant for a Superfund site that included language that was negotiated and eventually found to be satisfactory by the stakeholders, including: the potentially responsible parties, an easement holder covering multiple properties, multiple owners including the Michigan Land Bank, a privately owned parcel, and one owned by a university; and the DEQ and US. EPA. Language included additional paragraphs to satisfy the easement holder and to satisfy the university's desire to retain its mineral rights.

#### **RACER/ Commercial Vehicle Operations**

Kevin Lund, DEQ RRD, and Beth Landale, GHD

Free phase dense non-aqueous phase liquid (DNAPL) was identified within 10 feet of a surface water impoundment, at a site where groundwater is impacted with chlorinated organics. The DNAPL originated from historical industrial landfilling activities that occurred prior to 1960. The DNAPL constituents include approximately 40% trichloroethene (TCE) and up to 1.5% polychlorinated biphenyls (PCBs). The groundwater in the area is highly impacted with volatile organic compounds (VOCs), with the potential to vent VOCs at FAV levels to the adjacent surface water impoundment. The driver of the remedial action is the potential venting of VOC impacted groundwater as the PCBs are not mobile at this site. The presentation will discuss establishing the remediation requirements that will satisfy anticipated institutional controls. We will discuss high resolution

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sampling, three dimensional modeling, contracting, the onsite conditioning approach including the sequencing of the source removal and the overall results following implementation and unique regulatory cooperation and approvals necessary to permit utilization of these techniques.

#### **Alternate Institutional Control - Road ROW**

Kevin Schrems. DEQ RRD

Since June 2014, local units of government (LUGs) across the state have been approached to acknowledge the use of the Road Right-of-Way Alternate Institutional Control form as mechanism to prevent unacceptable exposure to hazardous substances that may be present in the soil and/or groundwater within the affected road right-of-way. A number of LUGs have executed the form, while others have engaged in discussions with the DEQ. This presentation will provide an update regarding those discussions and modifications to the form, with local examples if available.

No Further Action Report for a portion of a facility at former Fabco Fabricating Company using Land Use Restrictions Sheryl Doxtader and Sybil Kolon, DEQ RRD, and Tom Cok, Mannik and Smith This case study highlights the application of deed restrictions at the site where state funded drum removal resulted in additional response actions by a liable party to bring the site to closure, including elements now allowed by recent amendments to Part 201.

#### No Further Action/Technical Highlights Track

# Implications of 2010 and 2012 Part 201 Amendments on Characterization, Remediation and Unrestricted Closure of Sediments and Near Shore Soil at the former DTE Gas Broadway (Ann Arbor) Manufactured Gas Plant Site

Mitch Adelman, DEQ RRD, and Shayne Wiesemann, DTE Energy

This case study highlights how amendments of Part 201 in 2010, 2012 were applied to a historical Part 201 "Facility" to reach a No Further Action endpoint. for a portion of the Facility

#### **BASF Bourke Avenue**

Pat Thornton, DEQ RRD, and Jay Ash, P.G., AMO Environmental Decisions
This case study features a No Further Action Report for portion of a facility with a post closure agreement.

## Step by Step: Making Progress through Partial NFAs

Emily Bertolini, DEQ RRD, and WSP

This case study features multiple No Further Action Reports for a portion of the as a strategy toward achieving closure.

## Former Standard Oil Clare Bulk Plant, Part 201 NFA: Rule Changes and Collaboration

Lisa Chadwick, DEQ RRD, and Troy Sclafani, ARCADIS

Troy Sclafani, Professional Geologist with ARCADIS, and Lisa Chadwick, Geologist/Project Manager with DEQ RRD, will present a case study for a former bulk fuel plant where a No-Further-Action (NFA) Report was prepared and approved for a designated area on the property and for specific hazardous substances associated with petroleum fuel storage. This example takes advantage of recent Amendments to Part 201, alleviated the requirement for institutional controls to address regional groundwater impacts from off-site sources in the Clare Superfund Site, and allowed for an approved NFA that met client and regulatory requirements. The discussion highlights the benefits of collaboration between regulators and parties performing response activities, to leverage opportunities available under the Part 201 Amendments that were not available previously. These opportunities include addressing specific areas of a facility and specific hazardous substances, and extending review timeframes to facilitate active problem-solving and working together toward closure. From submittal to approval in 180 days!

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## **Reef Project - Thunder Bay**

DEQ RRD - Janice Adams

The DEQ RRD has implemented the Thunder Bay Reef Habitat Restoration project in Lake Huron off the shore of Alpena. This project was conducted due to valuable aquatic habitat having been lost on the natural reefs in Thunder Bay from years of cement kiln dust (CKD) disposal. CKD is a waste by-product from the cement manufacturing process.